REMARKS

Applicants submit that the foregoing amendments to the specification do not introduce new matter, and respectfully request entry of the amendments prior to the examination of this application.

Respectfully submitted,

Date: January 29, 2002

Gregory L. Bradley
Reg. No. 34,299

Medrad, Inc.
One Medrad Drive
Indianola, PA 15051
(412) 767-2400 x3021

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on January 29, 2002, with sufficient postage as first-class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Gregory L. Bradley

VERSIONS WITH MARKINGS TO SHOW CHANGES MADE

Please replace the paragraph at page 8, lines 13-26, with the following (Once Amended):

In a further aspect, the present invention provides an angiographic injection system for injecting an injection fluid into a patient including a pressurizing device for supplying injection fluid under pressure; a low pressure fluid delivery system; and a pressure isolation mechanism having a first port for connection to the pressurizing device, a second port for connection to the patient, and a third port for connection to the low pressure fluid delivery system. The pressure isolation mechanism includes a valve having a first state and a second state different from the first state. Preferably, the first state and the second state are mutually exclusive [or] of each other. The first state occurs when the second and third ports are connected and the first and third ports are connected. The second state occurs when the first and second ports are connected and the first and third ports are disconnected. The valve is normally biased to the first state (via, for example, a spring) and is switchable to the second state when fluid pressure from the syringe pump reaches a predetermined pressure level. The first and second ports remain connected in the first state and in the second state.

Please replace the paragraph extending from page 14, line 22, to page 15, line 2, with the following (Once Amended):

A controller unit 200 [is provideds] provides power to injector 30 and to peristaltic pump 100 in a controlled manner. Controller unit 200 provides communication between the various system components. A graphical user interface display 210 is preferably provided in connection with controller unit 200 to display information to the user and to enable the user to set and adjust device parameters. An audible feedback source 220 can be provided, for example, to provide feedback to the user of the rate of flow provided by injector 30. For example, a sound can increase in pitch, volume and/or frequency as flow rate is increased.

Please replace the paragraph at page 23, lines 3-13, with the following (Once Amended):

As illustrated in Figure 6G, many of the components of system 800 can be supported on a mobile stand 805. Injector 830 is preferably rotatable about stand 805 as indicated by the arrow of Figure 6G. In one embodiment of system 800 of Figures 6G and 6H: stopcocks were obtained from Medical Associates Network, Inc., a distributor for Elcam Plastic, under product number 565302; spikes were obtained from Qosina under product numbers 23202 and 23207, tubing was obtained from Merit Medical [under product numbers DCT-100 and DCT-148]; connectors were obtained from Merit Medical under product number 102101003, a rotating hub was obtained [form] from Medical Associates Network, Inc., a distributor for Elcam Plastic, under product number 565310; a peristaltic pump from Watson-Marlow was obtained having a product number of 133.4451.THF; and fluid level sensor from Omron were obtained under product number EESPX613.

Please replace the paragraph at page 26, lines 1-7, with the following (Once Amended):

Handheld controllers (whether or not in fluid connection with the fluid path) and related tubing and check valves are preferably replaced for each patient. Likewise, any waste port, pressure port, and the interface to catheter are preferably replaced for each patient. Aseptic connectors of a multi-patient set can, for example, be wiped clean before connecting a disposable [se] set for each new patient. Reusable or multi-patient sets preferably have a limited numbers of reuses and preferably are not used for longer than a set period of time (for example, an 8-hour period).